2050201 .1725900T

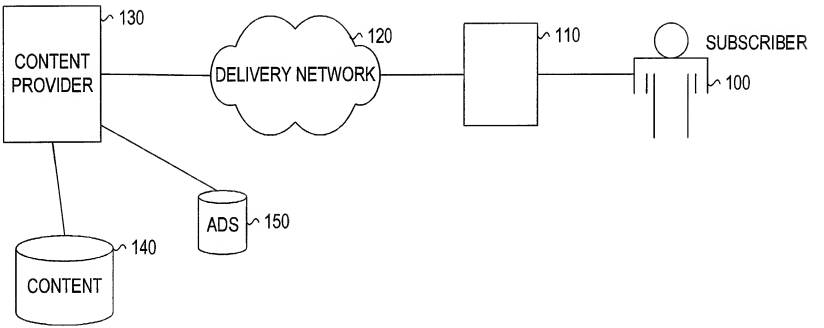

FIG. 1

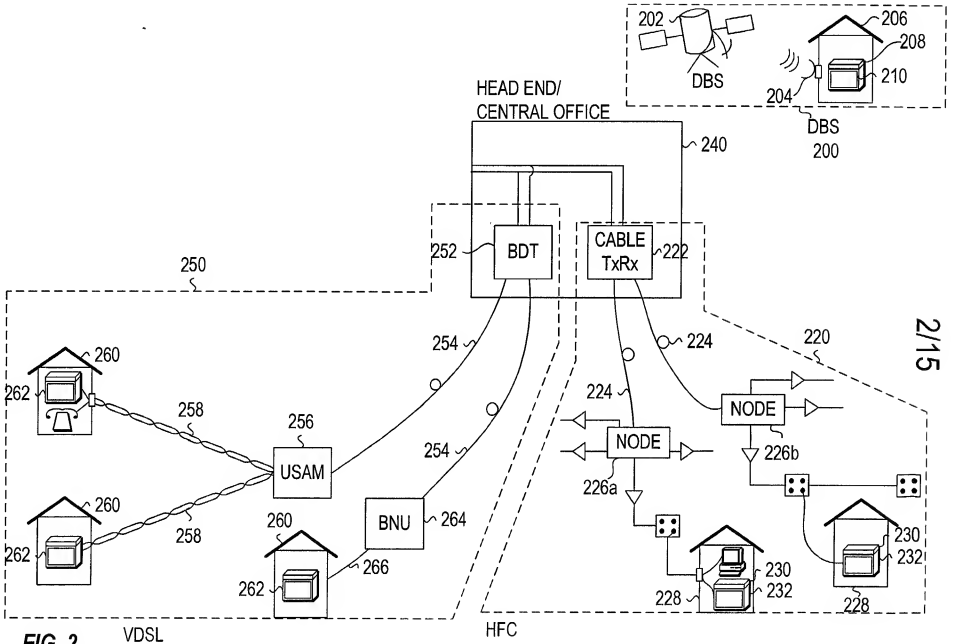
202
DBS
206
208
210
204
DBS
200
HEAD END/
CENTRAL OFFICE
240
250
252
BDT
CABLE
TxRx
222
220
254
224
260
262
258
256
USAM
254
224
NODE
NODE
226b
226a
260
262
258
BNU
264
260
262
266
230
232
228
230
232
228
VDSL
HFC

FIG. 2

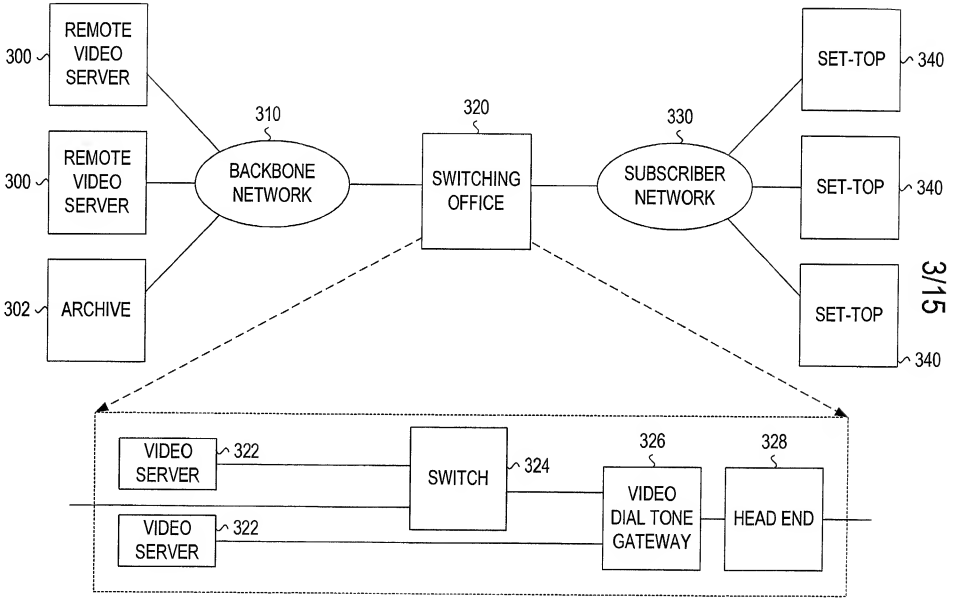
REMOTE VIDEO SERVER
300
REMOTE VIDEO SERVER
300
ARCHIVE
302
310
BACKBONE NETWORK
320
SWITCHING OFFICE
330
SUBSCRIBER NETWORK
SET-TOP
340
SET-TOP
340
SET-TOP
340
VIDEO SERVER
322
VIDEO SERVER
322
SWITCH
324
326
VIDEO DIAL TONE GATEWAY
328
HEAD END

FIG. 3

2050020 .1D6897Z1

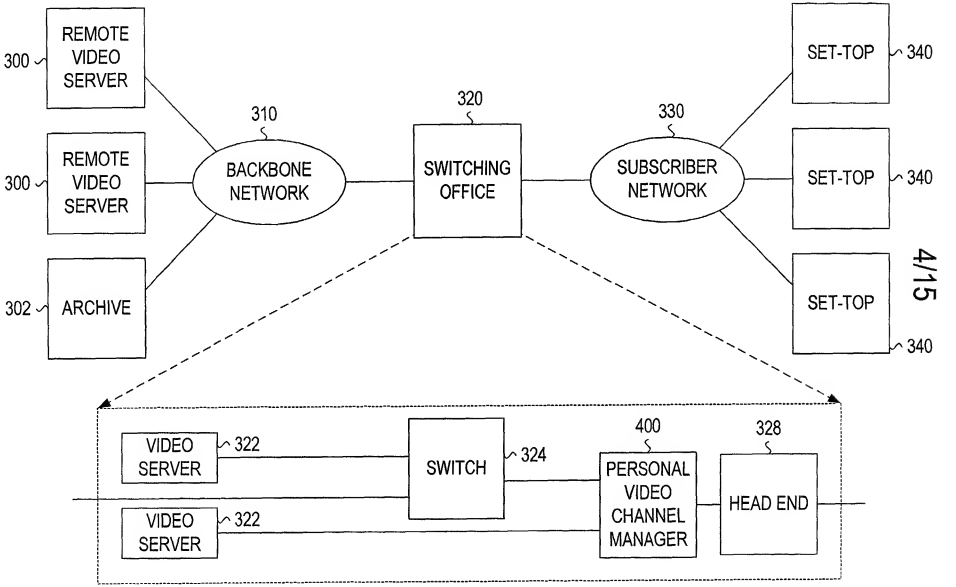

FIG. 4

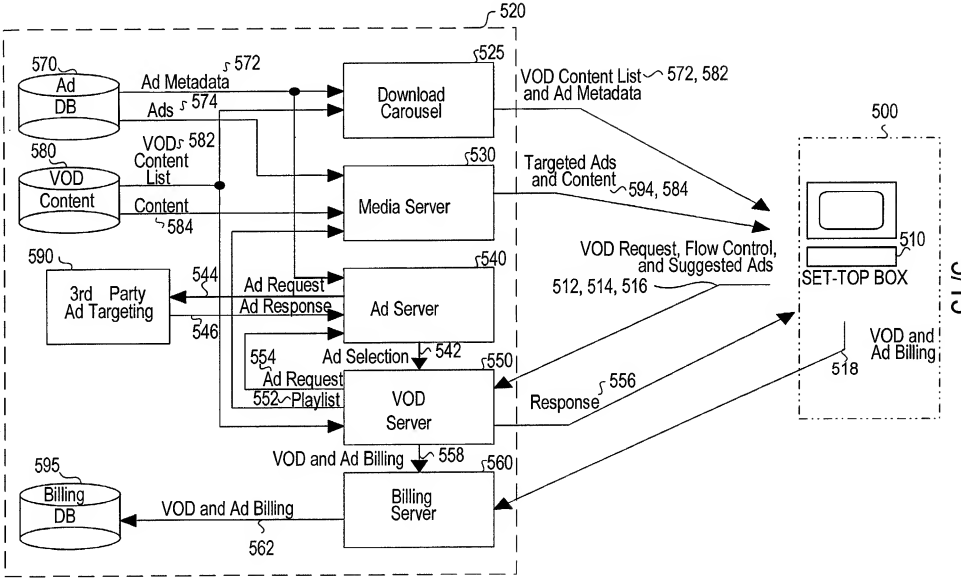
520
570
Ad DB
572
Ad Metadata
574
Ads
582
VOD Content List
580
VOD Content
Content
584
590
3rd Party Ad Targeting
544
546
Ad Request
Ad Response
554
552
Playlist
525
Download Carousel
530
Media Server
540
Ad Server
Ad Selection
542
550
VOD Server
VOD and Ad Billing
558
560
Billing Server
595
Billing DB
562
VOD Content List and Ad Metadata
572, 582
Targeted Ads and Content
594, 584
500
510
SET-TOP BOX
VOD Request, Flow Control, and Suggested Ads
512, 514, 516
VOD and Ad Billing
518
556
Response

FIG. 5

600	610	620	630
Media Name	**Type**	**HHMMSS**	**URL**
Ford Focus	Ad	000030	\\media \ads\ford \focus.mpg
Green Giant Corn	Ad	000030	\\media \ads\pillsbury \corn.mpg
Lord of the Rings	Preview	000300	\\media \previews \newline \lordofrings.mpg
Scary Movie II	Movie	012200	\\media \movies \disney \scarymovie2.mpg
Ford ZX2	Ad	000030	\\media \ads\ford \zx2.mpg
Progresso Soup	Ad	000030	\\media \ads\pillsbury \progresso.mpg

FIG. 6

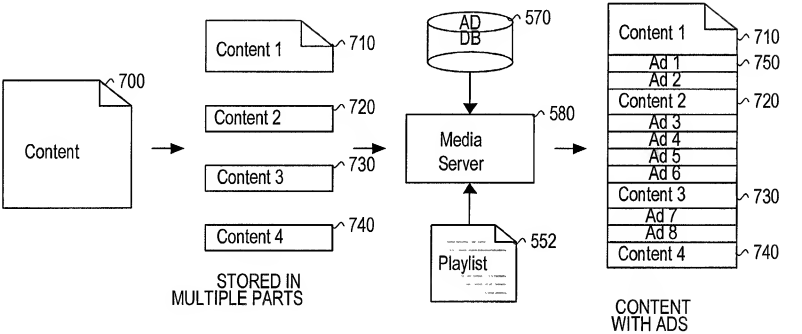
Content
700
Content 1
710
Content 2
720
Content 3
730
Content 4
740
STORED IN
MULTIPLE PARTS
AD
DB
570
Media
Server
580
Playlist
552
Content 1
710
Ad 1
750
Ad 2
Content 2
720
Ad 3
Ad 4
Ad 5
Ad 6
Content 3
730
Ad 7
Ad 8
Content 4
740
CONTENT
WITH ADS

FIG. 7

2050201 1772689001

ORIGINAL PLAYLIST

INDEX	DURATION	URL
001	000030	\\MEDIA\ADS\FOCUS.MPG
002	000030	\\MEDIA\ADS\CORN.MPG
003	012200	\\MEDIA\MOVIE\SCARY2.MPG
...		

REPLACE AD IN PLAYLIST WITH LOCAL REFERENCE

NEW PLAYLIST

INDEX	DURATION	SOURCE	URL
001	000030	MEDIA SERVER	\\MEDIA\ADS\FOCUS.MPG
002	000030	AD QUEUE	\\LOCALHOST\ADS\CORN.MPG
003	012200	MEDIA SERVER	\\MEDIA\MOVIE\SCARY2.MPG
...			

FIG. 8

20050207.1727.02050207

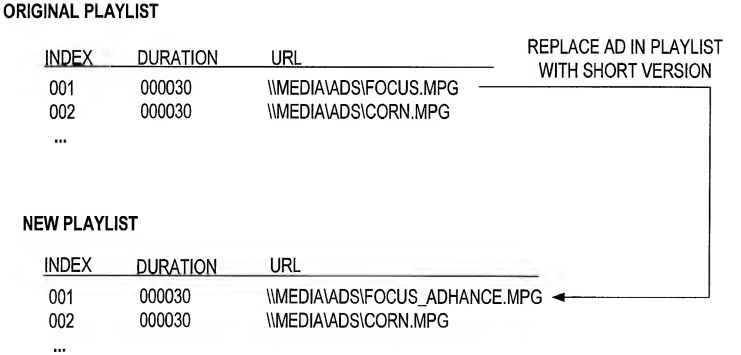

FIG. 9

INDEX	DURATION	URL	ALTERNATE URL
001	000030	\\MEDIA\ADS\FOCUS.MPG	\\MEDIA\ADS\FOCUS ALT.MPG
002	000030	\\MEDIA\ADS\CORN.MPG	\\MEDIA\ADS\CORN ALT.MPG
...			

FIG. 10

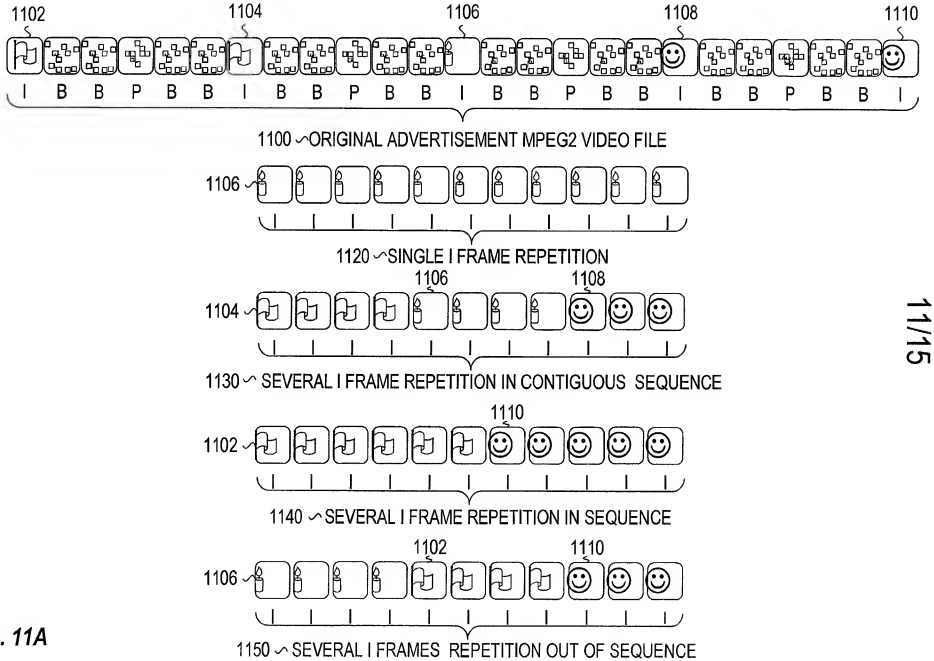
1102
1104
1106
1108
1110
I B B P B B I B B P B B I B B P B B I B B P B B I
1100 ORIGINAL ADVERTISEMENT MPEG2 VIDEO FILE
1106
1120 SINGLE I FRAME REPETITION
1106
1108
1104
1130 SEVERAL I FRAME REPETITION IN CONTIGUOUS SEQUENCE
1110
1102
1140 SEVERAL I FRAME REPETITION IN SEQUENCE
1102
1110
1106
1150 SEVERAL I FRAMES REPETITION OUT OF SEQUENCE

FIG. 11A

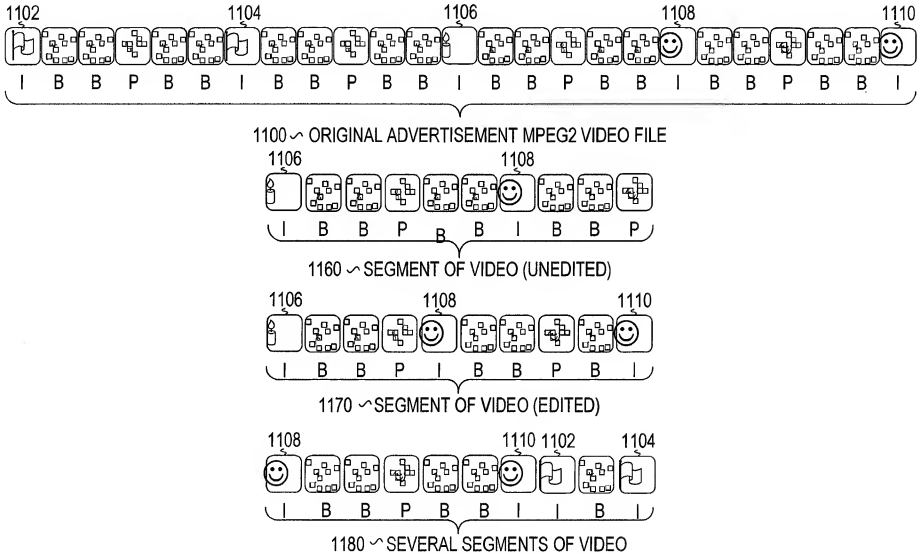
1102
1104
1106
1108
1110
I B B P B B I B B P B B I B B P B B I B B P B B I
1100 ORIGINAL ADVERTISEMENT MPEG2 VIDEO FILE
1106
1108
I B B P B B I B B P
1160 SEGMENT OF VIDEO (UNEDITED)
1106
1108
1110
I B B P I B B P B I
1170 SEGMENT OF VIDEO (EDITED)
1108
1110
1102
1104
I B B P B B I I B I
1180 SEVERAL SEGMENTS OF VIDEO

FIG. 11B

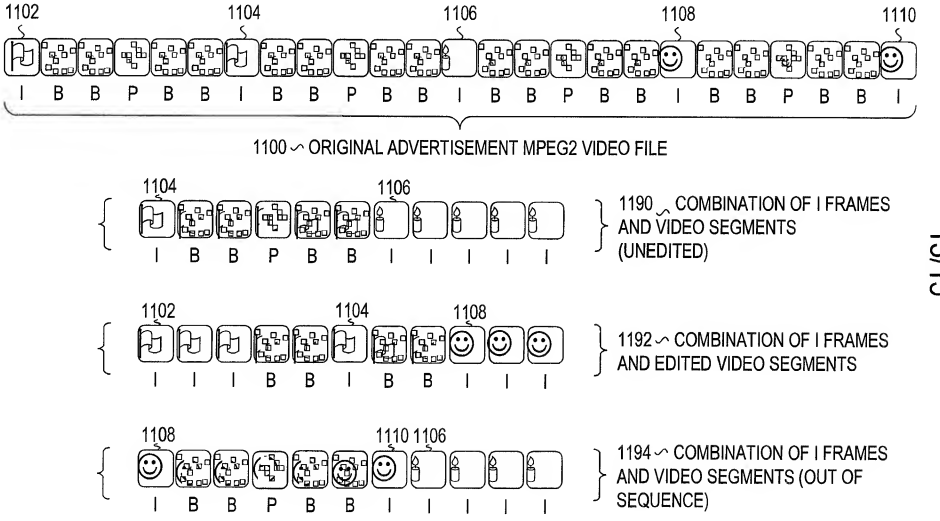
1102
1104
1106
1108
1110
I B B P B B I B B P B B I B B P B B I B B P B B I
1100 ORIGINAL ADVERTISEMENT MPEG2 VIDEO FILE
1104
1106
I B B P B B I I I I I
1190 COMBINATION OF I FRAMES AND VIDEO SEGMENTS (UNEDITED)
1102
1104
1108
I I I B B I B B I I I
1192 COMBINATION OF I FRAMES AND EDITED VIDEO SEGMENTS
1108
1110 1106
I B B P B B I I I I I
1194 COMBINATION OF I FRAMES AND VIDEO SEGMENTS (OUT OF SEQUENCE)

FIG. 11C

2050201 1726590 1

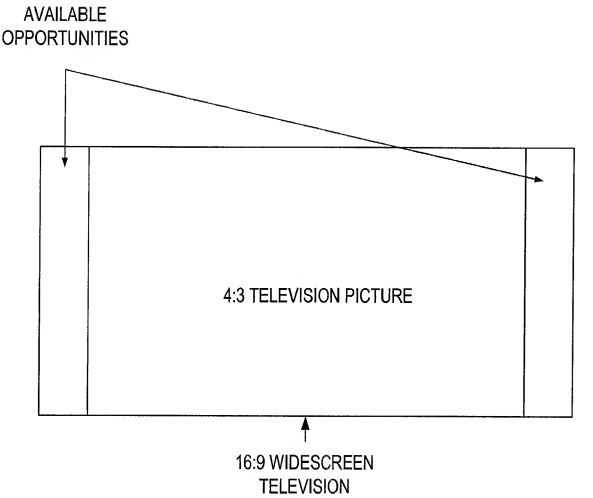

FIG. 12

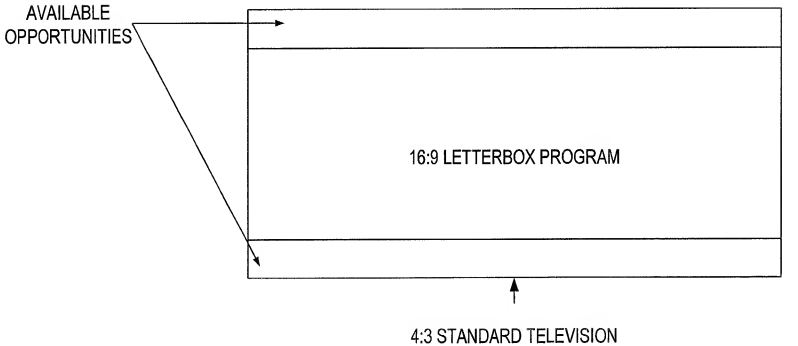
AVAILABLE
OPPORTUNITIES
16:9 LETTERBOX PROGRAM
4:3 STANDARD TELEVISION

FIG. 13